



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,774	07/30/2003	Ju Hwan Yun	9988.035.00-US	7781

30827 7590 10/13/2006

MCKENNA LONG & ALDRIDGE LLP
1900 K STREET, NW
WASHINGTON, DC 20006

EXAMINER

PATEL, RITA RAMESH

ART UNIT PAPER NUMBER

1746

DATE MAILED: 10/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/629,774

Applicant(s)

YUN ET AL.

Examiner

Rita R. Patel

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Rejections Withdrawn

35 USC 112 2nd rejection of claim 39 has been overcome due to amendment of filed on 7/24/06; applicant amended claim 39 to depend from claim 38.

Objection over claim 33 has been overcome due to applicant's amendment filed on 7/24/06; applicant amended claim 33 to be numbered as claim 35.

35 USC 103(a) rejection of claim 2 has been withdrawn due to applicant's cancellation of said claim in the amendment filed on 7/24/06.

Rejections Maintained

35 USC 103 rejection of claims 1 and 3-39 has been maintained.

Response to Applicant's Amendments/Remarks

This Office Action is responsive to the amendment filed on 7/24/06. Claim 2 is cancelled; claim 40 has been added. Claims 1, 15, 35, and 38-39 have been amended. Claims 1 and 3-40 are pending. Applicant's amendments and remarks have been fully considered, however have not been found to be persuasive.

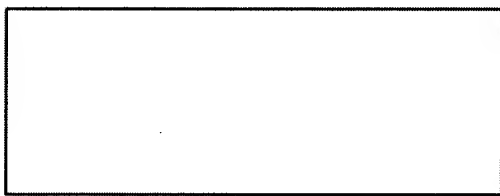
Thus, claims 1 and 3-40 are finally rejected for the reasons of record.

Applicant acknowledges from the Office Action filed 4/24/06 (p.4) the Mills reference teaches that glass or transparent materials, such as plastic are commonly

Art Unit: 1746

known to be mutable in shape and therefore engageably fit the shape of the frame of the window. However, applicant contests said teaching of Mills teaches away from applicant's claim of an outer window wherein the door frame has a front surface curved in left/right directions, and the outer window is curved the same with the door frame.

Mills teaches that frame 18 is made of a strip of metal or other flexible, bendable material which is bent into a rectangular form. Although in Mills, the window is illustratively depicted as flat along a front surface, the window may similarly be bent/curved in a left/right direction as anticipated by Mills teaching of a bendable rectangular frame. For example, the frame may obviously be bent for achieving aesthetic purposes such as curvature in the left/right directions, as shown here:



flat front surface



curved front surface

The frame of Mills may be curved, as it is formed of a material which is meant to be flexible and bendable for conforming about the shape of the rectangular window of Mills; although the window of Mills is rectangular, it may embody a flat or curved surface.

Mills obviates curved rectangular surfaces by indicating the frame is formed of a flexible material; moreover, glass or plastic windows which provide a translucency are concurrently known in the art to be materials ably formed in a curved shape. Glass or

plastic are malleable materials commonly wrought in various shapes to meet aesthetic criteria.

Applicant further argues that Mills does not teach the outer window is curved the same with the door frame; rather applicant concludes that because Mills teaches the side walls of the frame to be parallel, they must also be of a flat, rectangular shape. However, Mills teaches that the outer window frame is conformable to the shape of the window, specifically, the outer window frame is formed of a flexible, bendable material to fit the window frame; thus, the outer window of Mills is wholly obviated to curve the same with the door frame. Secondly, as seen in the diagram of the 'flat front surface' and the 'curved front surface' above, both surfaces has side walls and top-bottom walls which are parallel to one another, respectively. Namely, in the 'curved front surface' the side walls are parallel in the vertical direction, and the top-bottom walls are parallel in a horizontally-curved direction; curved surfaces may be parallel if at all points the surfaces are formed within a single plane and are equidistant everywhere. The Office would like to provide a definition of the term parallel: being an equal distance apart everywhere (parallel. The American Heritage® Dictionary of the English Language (2003). Retrieved 10 October 2006, from xreferplus. <http://www.xreferplus.com/entry/4116487>).

Therefore, Mills obviates a curved window frame and window which is parallel in shape.

It is further noted that the applicant failed to remark or address motivations offered by the Examiner for embodying a curved window structure in Mills. Examiner's motivation for having a curved window structure in Mills is repeated here: curved windows are commonly known in the art for achieving a strong window surface that is a

Art Unit: 1746

known equivalent in the art for maintaining minimization of heat loss therefrom, while concurrently providing an aesthetic view for the user to see inside the machine. A curved window amplifies the view inside the apparatus, hence allowing a magnified/detailed view to the user of items being laundered therein. Users are known in the art to commonly check on the status of the items being laundered therein said machines during operation thereby allowing users to check the status of laundering without opening the machine or impeding laundry functions; a laundry machine comprising an enhanced curved-window view achieves said means for an aesthetically improved view inside the machine. It would have been obvious to one of ordinary skill in the art at the time of the invention to embody curved window surfaces in the Mills reference; curved windows are commonly known in the art for use in the art of home appliances for offering the user an ability to easily see inside the machine during operation.

Additionally, applicant traverses the rejections of claims 10, 11, 14, 31-33, 36, and 38 in view of applicant's arguments made over said claim limitations; however, said arguments are moot in view of the references taught herein and Examiner's response to applicant's remarks over Mills.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-9, 12, 13, 15-30, 34, 35, and 37-40 are rejected under 35

U.S.C. 103(a) as being unpatentable over Studt (5,195,647) further in view of Mills (US Patent No. 5,799,647).

Studt teaches a clothes dryer with a door assembly including an outer panel to which a handle, latching mechanism, and hinges are mounted (Abstract). However, Studt fails to teach said door assembly including a double-paned glass window therein. Mills teaches this deficiency by disclosing a door having a pair of rectangular window panels held in spaced parallel relation by a frame. Retainer flanges extend laterally outwardly from the spacer flanges over the edges of the panels and clips are provided to clamp the panels to the frame (Abstract). It would be obvious to one of ordinary skill in the art to include a pair of windows in the door of Studt, for achieving expectations of allowing the user to see within the apparatus during operation, while maintaining means for ensuring minimal heat loss.

Mills further teaches the window unit 10 comprising a pair of rectangular window panels or panes 14, 16 are made of glass or the like transparent or translucent material, a frame 18 and clips 19. The frame is preferably made of a one-piece strip of metal or other flexible, bendable material (col. 2, lines 1-4 and 10-11). The frame may be made

Art Unit: 1746

of bendable material, as taught by Mills, thereby being able to conform to curved or other shapes. Also, glass or like transparent materials, such as plastic are commonly known to be mutable in shape and therefore engageably fit the shape of the frame, as taught by Mills. The clips taught by Mills above, reads on applicant's claims for a "plurality of hooks on an outer peripheral surface". Therefore, the frame and window may be formed of a curved surface wherein the inner and outer windows are curved the same with the frame of the window panels. It is well settled that the intended use of a claimed apparatus is not germane to the issue of the patentability of the claimed structure. If the prior art structure is capable of performing the claimed use then it meets the claim. *In re Casey*, 152 USPQ 235, 238 (CCPA 1967); *In re Otto*, 136 USPA 459 (CPA 1963).

Curved windows are commonly known in the art for achieving a strong window surface that is a known equivalent in the art for maintaining minimization of heat loss therefrom, while concurrently providing an aesthetic view for the user to see inside the machine. A curved window amplifies the view inside the apparatus, hence allowing a magnified/detailed view to the user of items being laundered therein. Users commonly check on the status of the items being laundered therein said machines during operation thereby allowing users to check the status of laundering without opening the machine or impeding laundry functions; a laundry machine comprising an enhanced curved-window view achieves said means for an aesthetically improved view inside the machine. Choice in aesthetic designs was held to have been obvious. *St. Regis Paper*

Co. v. Beemis Co. Inc. 193 USPQ 8, 11, (1977); *In re Harza* 124 USPQ 378 (CCPA 1960).

Studt discloses the door assembly 16 includes an outer door panel 50 and an inner liner 52, whereby the door panel is fabricated from sheet metal, and has a face panel 54 with an orthogonal lip 56 (col. 4, lines 16-19). The front door panel 50 reads on applicant's claim of an outer part of the door, and the inner liner 52 reads on applicant's claim for a front part of the door. Aforementioned flanges taught by Mills form a space between the first and second windows and clips are provided for fastening window panels to the frame, which can be attached to the frame of Studt. Moreover, gaskets/sealing members are commonly known in the art for sealing door members of laundry machines and although Mills provides clips for fastening said windows, other fixing agents, such as a liquid sealant are known equivalents in the art. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a liquid sealant for sealing said door members since applicant has not disclosed that liquid sealant solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with other sealants and the selection of any of these known equivalents to provide adherent functions would be within the level of ordinary skill in the art. Moreover, Studt discloses the gasket 74 has a flexible flap 76 which seals against the face of recess 22 when door assembly 16 is closed (col. 4, lines 40-44).

Studt discloses the inner liner 52 is connected to door panel 50 by a plurality of screws 78a-c that are driven in through orthogonal lip 56 of door panel 50 and into

corresponding screw bores 80a-c in the respective perimeter edges 82 of liner 52 (col. 4, lines 45-49). Hence, it would be obvious to provide a thickness of a seating groove for said gasket holes, as shown by Studt's mounting of the door panel by means of the screws—the seating groove would be used for holding the hooks therein, similar to the orthogonal lip for holding screws therein.

In Figures 1 and 3 of Studt, Studt illustrates a sloped, bent part projected backward of the lower, inner portion of the door; this bent portion provides increased support and rigidity to the door structure.

Mills discloses that in order to assemble the parts of the window unit, the panels 14 and 16 are placed against the spacer flanges 30 and 32 of the frame, inside the retainer flanges 36, 38, 40 and 42 so that the retainer flanges engage the edges of the panels (col. 3, lines 16-19). The flange/clip system disclosed by Mills can be made adjustable to fit the sloped inner door taught by Studt. Hinges and clips are inherently known to be made adjustable, hence it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide adjustable clips and hinges in the window unit of Mills for an appropriate fitting to Studt's walls since it has been held that the provision of adjustability, where needed, involves only routine skill in the art. *In re Stevens*, 101 USPQ 284 (CCPA 1954).

In addition, Studt does not explicitly disclose a specific angular range for the slope of the inner wall, taught above; however, it would have been obvious to one having ordinary skill in the art at the time the invention was made to slope the angle within the range of about 1-20 or even 8-10 degrees since it has been held that

discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Studt teaches a clothes dryer apparatus 10 including a cabinet 12 having a front panel 14, a door assembly 16 connected to front panel 14 by hinges 18 and screws 20, and door assembly 16 fits into a recess 22 in front panel 14 when closed. In conventional manner, clothes to be dried are loaded into clothes drum 24 through access opening 26 and door assembly 16 is then closed (col. 1, lines 35-41). Moreover, the position is taken that one of ordinary skill in the art would at once envisage that a motor is anticipatory for rotating the clothes drum.

Re claims 6, 7, 29 and 30 wherein applicant claims paint coated colors, it has been found that choice in aesthetic designs was held to have been obvious. *St. Regis Paper Co. v. Beemis Co. Inc.* 193 USPQ 8, 11, (1977); *In re Harza* 124 USPQ 378 (CCPA 1960).

Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Studt and Mills, further in view of Faccoli (EP 0851177 A1).

Studt and Mills disclose the Studt teaches sealing by means of a gasket, however, he does not disclose how the gasket is sealed thereupon the door assembly; it would be known in the art that any functional equivalence for mounting said gasket would be reasonably effective. Arguably, hooks and holes to mount the seal thereupon would be an effective means for mounting the gasket. Faccoli teaches an elastomer sealing gasket to be interposed between a front rim of the oven and the oven door,

Art Unit: 1746

comprising a continuous strip 1, provided with metal elements 2, 2', having respective hooks 21, 21' for engagement in corresponding holes provided in the oven structure which said metal elements 2' are inserted in a tubular cavity 3 of the gasket through respective openings 30 made in a wall 4 defining said tubular cavity on one side 3 said openings 30 having an intermediate portion 31 extending substantially in the longitudinal direction of said strip 1 and two end portions 32 with an arched outline (Abstract). Although Faccoli's gasket teaching is not explicitly stated for a door of a front loading laundry machine, it may be used for said purpose. It is well settled that the intended use of a claimed apparatus is not germane to the issue of the patentability of the claimed structure. If the prior art structure is capable of performing the claimed use then it meets the claim. *In re Casey*, 152 USPQ 235, 238 (CCPA 1967); *In re Otto*, 136 USPA 459 (CPA 1963). Moreover, Faccoli teaches it would have been obvious to provide a thickness of a seating groove for said gasket holes, as shown in Figure 4 by the mounting of the gasket within the gasket holes—the seating groove would be used for holding the hooks therein.

Claims 14 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Studt and Mills, further in view of Linton et al. herein referred to as "Linton" (US Patent No. 6,109,277).

Studt and Mills teach the claimed invention, however, fail to disclose paint coatings disposed thereupon said apparatus. Linton discloses a parts washer wherein the housing 20 may also be covered with insulating ceramic paint, the insulation

increases the efficiency of the parts washer by maintaining a minimization of heat loss for the apparatus (col. 5, lines 7-9). It would be obvious to one of ordinary skill in the art at the time of the invention to use ceramic paint in the coating of the apparatus taught by Studt and Mills. Although Linton teaches the use of ceramic paint for a parts washer, the ceramic paint may equally be used for a laundry machine for the same purpose. It is well settled that the intended use of a claimed apparatus is not germane to the issue of the patentability of the claimed structure. If the prior art structure is capable of performing the claimed use then it meets the claim. *In re Casey*, 152 USPQ 235, 238 (CCPA 1967); *In re Otto*, 136 USPA 459 (CPA 1963).

Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Studt and Mills, further in view of Gebhardt (US Patent No. 3,223,276).

Studt and Mills teach the claimed invention, however Studt does not say the gasket is used explicitly for prevention of leakage of heated air; however, it is commonly known in the art to use a gasket for achieving said functions. Gebhardt discloses a door seal for household appliances wherein, such appliances require a tight seal in the gap between the door and the door frame to prevent the escape of vapors of liquid or the ingress of heat from dishwashers and laundering machines (col. 1, lines 14-17).

Claims 32 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Studt, Mills and Faccoli, further in view of Gebhardt; the references applied here are for the same reasons as given above.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rita R. Patel whose telephone number is (571) 272-8701. The examiner can normally be reached on M-F: 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571) 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

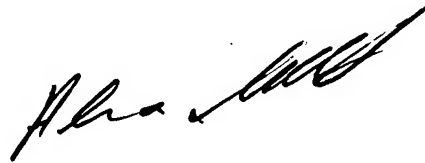
Art Unit: 1746

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RRP

A handwritten signature in black ink, appearing to read "Alex Markoff", written in a cursive style.

ALEXANDER MARKOFF
PRIMARY EXAMINER